

REMARKS

The Abstract and claims have been amended in accordance with the Examiner's suggestions. Accordingly, the objection to the Abstract and the rejection of claim 15 under 35 U.S.C. § 112 should both be withdrawn.

Claims 1 and 3 have been rejected under 35 U.S.C. § 102(b) as being anticipated by IBM Technical Disclosure Bulletin, December 1961. Applicants respectfully submit that this rejection cannot be sustained.

Applicants' invention pertains to a method of making an electret. The method comprises condensing vapor onto a dielectric article to form a condensate on the dielectric article. The vapor is condensed from an atmosphere of a controlled environment onto the dielectric article. The dielectric article is subsequently dried to remove the condensate from the surface of the article. This series of steps allows an electret to be produced, which exhibits at least a quasi-permanent electret charge.

The IBM Technical Disclosure Bulletin discloses an imaging process for simultaneously exposing and developing a film. This is achieved by superimposing a photoconductive material on a uniformly charged film 4, and then optically exposing it to light to conduct the photoconductive material on the film, which in turn causes an increase in electrostatic field strength in the exposed areas of the film 4. The image is subsequently developed by exposure to solvent vapor in chamber 16.

The IBM Bulletin does not disclose creating an electret through use of the steps of the present invention. The film 4 that is processed in the IBM Bulletin has a charge pattern imparted onto it by the photoconductive material. At no time is an electret created by condensing the vapor onto a dielectret to form a condensate thereon, followed by a drying. Because the IBM Bulletin does not disclose making an electret through the sequence of steps of applicants' invention, it does not anticipate their invention under the terms of 35 U.S.C. § 102(b). Applicants accordingly request that this rejection be withdrawn.

Claims 1, 3-4, 7, and 10-11 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,351,789 to Sidles et al. (Sidles). Sidles discloses a method of making a rubber or plastic article such as an automobile tire. The process involves removing objectionable air trapped within the mold cavity as it is closed without using conventional vent holes in the mold sections. Sidles does not disclose that an electret can be produced through its process for molding.

Sidles provides no indication that an electret charge is imparted to the rubber or plastic article (for example tire) using the Sidles method. The Examiner therefore must be relying on inherency to support the position that an electret is being produced in Sidles. As the Examiner is aware, however, inherency requires that the prior art record "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."¹ Inherency cannot be established by probabilities or possibilities or the mere fact that a certain thing may result from a given set of circumstances.² The present record, however, exhibits no evidence that an electret can be produced in the Sidles process. Sidles is concerned with removing objectionable air trapped within the mold cavity when the mold is closed. This objective surely does not establish that the production of an electret would be the result that naturally flows from the teachings of the Sidles patent. Under such circumstances, an anticipation rejection cannot stand under the terms of 35 U.S.C. § 102(b).

Claims 1-4, 7, 9-11, 14-17 and 22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,496,507 to Angadjivand et al. (Angadjivand) in view of U.S. Patent 5,759,926 to Pike et al. (Pike), or U.S. Patent 4,685,569 to Osaki et al. (Osaki). Applicants respectfully submit that this rejection cannot be sustained. None of these documents teach or suggest condensing a vapor onto a dielectric article to create an electret. Angadjivand teaches spraying water onto a dielectric article, Pike teaches splitting fibers by thoroughly contacting them with a hot aqueous split-inducing medium (by passing the fibers through a hot-water bath or spraying), and Osaki teaches moistening non-wood pulp and paper making materials by spraying with water or by exposure to steam. Further, only Angadjivand mentions making electret article through an exposure to a liquid. Pike is concerned with making super-fine fibers for use in hydrophilic fabrics, and Osaki creates a surface potential on plastic particles by corona charging.

Since neither the primary reference to Angadjivand nor the secondary reference to Pike or Osaki teach or suggest the basic steps of the present invention, the combination of references would not have rendered applicants' invention obvious to a person of ordinary skill within the meaning of 35 U.S.C. § 103.

In addition, the record is devoid of any teaching or suggestion for combining the teachings of Angadjivand with either Pike or Osaki. The probable reason that the record is devoid of such

¹ *Continental Can Co. v. Monsanto Co.*, 20 USPQ2d 1746, 1749 Fed. Cir. 1991.

² *In re Robertson*, 49 USPQ2d 1949, 1951 Fed. Cir. 1999.

VERSION WITH MARKINGS TO SHOW CHANGES MADE ✓**In the Abstract**

A method of making an electret includes condensing vapor from the atmosphere of a controlled environment onto a dielectric article and then drying the article to remove the condensate. The dielectric article may be a nonconductive polymeric material, and the condensate may include a polar liquid. The method is particularly useful for forming an electret from a porous material such as a nonwoven fibrous web. The method can enable individual fibers in the web to exhibit at least quasi-permanent electrical charge.

In the Claims

15. (amended) The method of claim [11] 14, wherein the nonwoven fibrous web comprises microfibers.



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